

K>MOBIL

THE KIRCHHOFF GROUP MAGAZINE

The impossible
is now possible

ENGINIUS

Brand
new

ENGINIUS – We turn ideas into an amazing trade fair booth. The commercial vehicle industry met at the IAA Transportation in Hanover. ENGINIUS attended for the first time, what a success! [Continue on page 018](#) ▶

Content



Imprint

K>MOBIL
the KIRCHHOFF Group magazine

Publisher: KIRCHHOFF Group,
Arndt G. Kirchhoff
Stefanstraße 2, D-58638 Iserlohn
Postfach 26 26, D-58634 Iserlohn
Tel. +49 2371 820 - 00
info@kirchhoff-gruppe.de

Responsible for the content:
Arndt G. Kirchhoff
Employees: Sabine Boehle, Alexandra Brabender,
Andreas Heine, Frederik Lösch, Sophie Rammert,
Claudia Schaeue, Ani Teubner

Pictures:
Adobe Stock, aha, Cosima Hanebeck Fotografie,
EMG (European Mobility Group), FAUN Gruppe,
Ford Motor Company, Honda, Jan Chaloupka,
KIRCHHOFF Automotive, KIRCHHOFF Gruppe,
KOCO, LiXiang, Marcin Piechowski, Melissa
Rachel Kavanagh, Mercedes-Benz, Messe
Hannover, Privat, Sebastian Daoud für VAK e.V.,
Shutterstock, Val Metal, Volkswagen Gruppe,
ZOELLER Gruppe

Production:
HÖHNE MEDIA GmbH & Co KG
www.hoehne-media.de



004 Editorial

POST PANDEMIC

010 Three Years of the Pandemic.
What Has Changed?

SUPPLY CHAINS / GLOBAL TRADE

014 Three Years After Brexit – Where are We Now?

016 Global or Local Sourcing?

SUSTAINABILITY

018 ENGINIUS – Colorful and Diverse

020 Reducing CO₂ Through Induction
in Press Hardening

022 "Green" Steel

024 Our Company History in Pictures

028 More Than Just a Pastime

KIRCHHOFF AUTOMOTIVE

032 New Products on the Road

038 Perfect Teamwork

040 Three Successful Trade Show Appearances

044 The Factory Concept is Decisive

046 What are Digital Twins?

048 The Best of the Best

KIRCHHOFF MOBILITY

050 REHACARE 2022: Innovative
Aids and Solutions for People
with Disabilities

WITTE TOOLS

052 A Successful Comeback

KIRCHHOFF ECOTEC

054 We Drive the Change

056 The New Sweep

058 Ready. Steady. Green!

060 Big Wheels Keep on Turning....

062 Nice to Meet You

064 MEDIUM X2/X4 – Body Series
Successfully Launched on the Market

066 A Very Special Year

070 Close to the Customer

**Dear customers
and friends of our
group of companies,
Dear employees,**



Russia's war of aggression against Ukraine has made it clear to us in Europe, and especially in Germany, that we have made a number of wrong decisions in recent years. The dependence of gas from Russia and the politically motivated energy turnaround, especially the phasing out of nuclear energy, are putting a strain on our industry – up to and even beyond its limits.

In addition to the challenges already mentioned, our group of companies is working intensively on the mobility turnaround and digital transformation. You can read more about these topics in this issue.

“ with the objective of a secure base-load, and competitive energy supply, we must change course as consistently and quickly as possible, while setting the appropriate priorities. It will also be unavoidable that companies and the global population will have to bear additional burdens, because the state will not be able to bear this in the long term with further debt; this would restrict future generations' room for maneuvering. Tax increases will not be a solution either, since they would further weaken the competitiveness of companies and place a further burden on the top performers in our society.

We are very concerned about further impending geopolitical conflicts, particularly in the Asia-Pacific region. On one hand, the United States and China are engaged in a systems race, and on the other, the Chinese threat to Taiwan represents another major threat to global supply chains. The G20 summit in Bali did not resolve these conflicts, but it provides some optimism that the American and Chinese presidents have undergone discussions and at least re-established a basis for future dialogue. Another important signal from the G20 summit is that Russia is largely isolated because of the Ukraine war, and Moscow can no longer count on the benevolent support from China and India. ▶

The past year has not made economic action any easier either. A year ago, we reported on how our companies had adapted to new challenges and become more resilient during a global crisis. This included, first and foremost, all the restrictions triggered by the COVID-19 pandemic, the subsequent problems in supply chains, and the shortage of semiconductors and truck chassis in the automotive and ecotec sectors respectively. Looking back at this year, these challenges did not disappear, but were instead joined by consequences of Russia's war on Ukraine. Again, there were bottlenecks in the supply chain and uncertainties in our customers' call-offs, which we had to adjust to constantly. I am pleased to report that thanks to our dedicated employees, our companies still continued to cope well with the circumstances. We were even able to launch a new brand: during the middle of the year, KIRCHHOFF Ecotec joined the market with their ENGINIUS brand for environmentally friendly hydrogen trucks.

With almost 13,000 employees in our four business units (KIRCHHOFF Automotive, KIRCHHOFF Ecotec, KIRCHHOFF Mobility, and WITTE Tools), the KIRCHHOFF Group will achieve sales of 2.5 billion euros this year.

However, I am also particularly proud to recognize the humanitarian efforts of our company; even with the ongoing war, the focus was not only on economic efforts. Shortly after the war began, our employees, especially at our Eastern European plants in Poland, Hungary, and Romania, have been helping refugees from Ukraine. The assistance provided ranged from donations in cash and kind, transportation for refugees, language instruction/accommodation in their homes, etc., and was all organized by the teams at our plants.

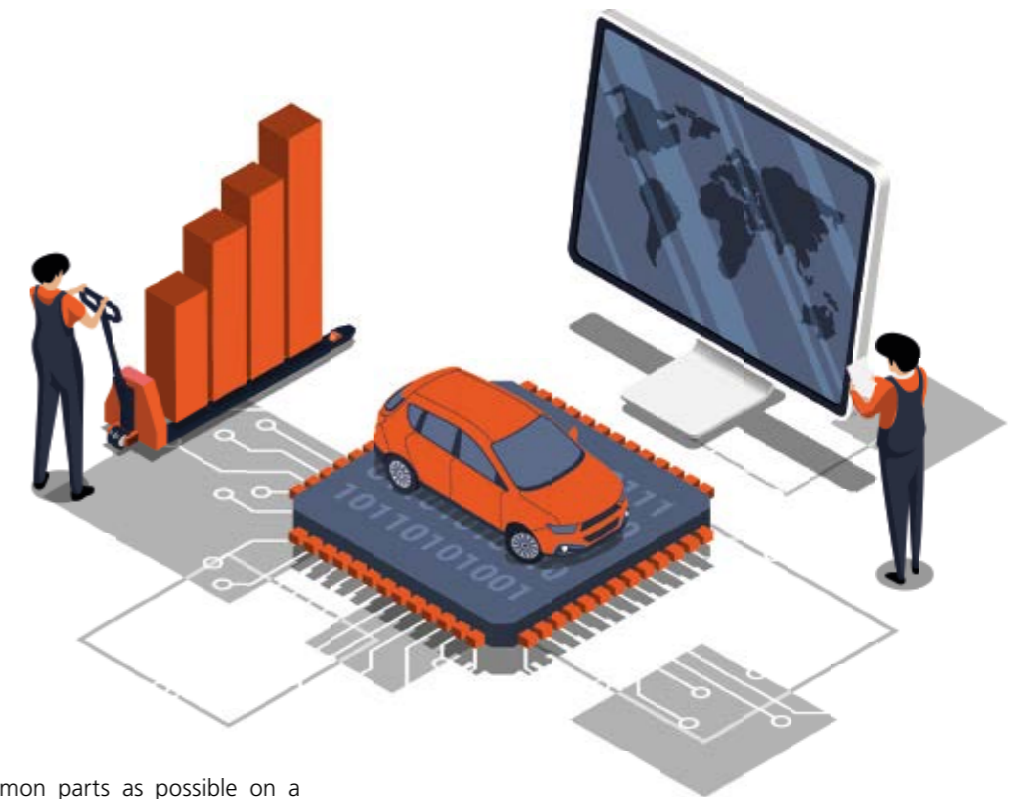
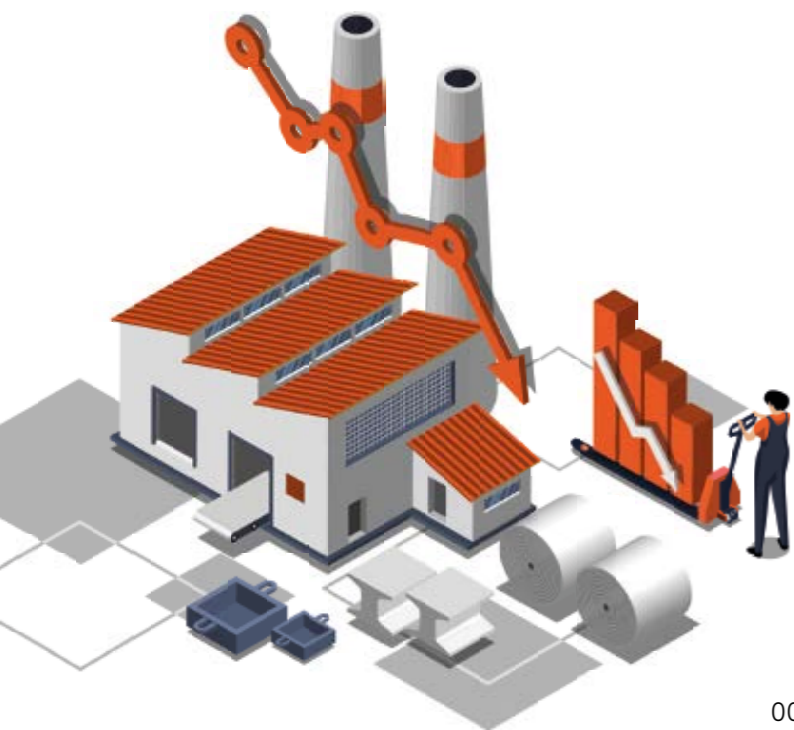
Significant increases in manufacturing costs are placing a heavy burden on the automotive industry, and are also presenting **KIRCHHOFF Automotive** with additional challenges. The hoped-for easing of the situation on international automotive markets has not yet materialized. Only the Chinese passenger car market is recording a significant increase in vehicle registrations at pre-COVID-19 levels. However, we are encouraged by the fact that many new products and safety structural components developed specifically for e-vehicles have been successfully launched in our European and North American plants. Of particular note, is the new development of a front axle carrier for the BMW FAAR WE platform, which is installed in both classic combustion engines and battery-electric and plug-in hybrid vehicles. The front axle beam has to be adapted for each type of drive. Despite high component complexity, KIRCHHOFF Automotive has succeeded in implementing an economical concept

by using as many common parts as possible on a platform basis. Crash safety also plays a decisive role in e-vehicles. With the underride protection for VW's electric platform, KIRCHHOFF Automotive is, for the first time, supplying a component in series production. When put together with other components, it forms the battery module of an e-vehicle and protects it. KIRCHHOFF Automotive has also continued to grow in 2022 – new technologies and facilities are expanding capacities and increasing the competitiveness of our sites worldwide. At our North American sites, we made extensive investments in new presses this year. Two years of detailed research and development work on the use of Gen-3 steel resulted in the first order for a crash-relevant component made of this material. This marks the entry of the North American KIRCHHOFF Automotive plants into the market for high-strength body-in-white components. The plants in Shenyang, China, and Craiova, Romania, are currently undergoing extensive expansion, specifically for the start-up of new products for electric vehicles. In Shenyang, a new 1,600 t servo-transfer press will also be able to process high-strength multiphase steels in the future. Investments were also made in new machines and technologies at our German locations in Attendorn and Iserlohn. On a complex production line the inner wheel arches for the two e-vehicles, Audi e-tron and ID. Buzz, the successor to the cult favorite VW T1, are manufactured in Attendorn, and in the future also for the entire VW MEB (modular e-drive system) platform.

A manufacturing concept for assembly has been implemented in Iserlohn, representing an automated one-piece flow process on around 1,000 m².

Aware of our ecological responsibility, we have defined a CO₂ roadmap comprising four identical elements for all plants, in varying degrees: energy monitoring and reduction of energy consumption, purchase and production of renewable electricity, conversion of natural gas to renewable electricity or biogas, and the introduction of new low-CO₂ or CO₂-free technologies. For example, by 2025, all European KIRCHHOFF Automotive plants are to purchase electricity exclusively from renewable sources, and by 2030, all global locations.

For **KIRCHHOFF Ecotec**, with its two main brands FAUN and ZOELLER, 2022 was initially characterized by IFAT, the world's leading trade fair for environmental technologies and recycling management. It was held in Munich at the end of May, for the first time in four years. Here, the Group was able to present a large number of new lifters, bodies, and superstructures, and inform both local and international customers about our performance philosophy via demonstrations and discussions. ▶





Another very important event was the presentation of our newly developed ENGINIUS brand for chassis with hydrogen fuel cell electric drive for climate-neutral load transport. In May, shortly before IFAT, ENGINIUS had the big brand launch in front of enthusiastic representatives from the customer base, politics, business, science, and administration. Not only was ENGINIUS' market presence made known at the IFAT, but it was further intensified in September at the IAA TRANSPORTATION in Hanover. In addition to the BLUEPOWER chassis for 27 tons gross vehicle weight, the CITYPOWER was presented as a lighter version for climate-neutral distribution transport. Great customer interest and orders from new target groups in the forwarding and distribution sector rounded off the successful brand appearance of ENGINIUS. By the end of the year, more than 60 climate-neutral ENGINIUS commercial vehicles will have been delivered.

As part of the further development of our products and production processes, we opened a new technology center for development and engineering this year: the KIRCHHOFF TEC Center in Poland. With three newly built service locations in the French cities of Valence, Montabaun, and Lambesc, we are moving even closer to our customers in regional terms.

Other milestones this year include the complete take-over of the crane business for refuse collection vehicles from Monjot, the completion of new buildings at the French refuse vehicle plant in La Rochelle, and the expansion of activities for SCANTEC, our unique product for detecting contaminants in recyclables. The FAUN team achieved a very special event at the beginning of October with the acquisition of the TROMBIA company in Finland, one of the world's first manufacturers of autonomous and electrically operated sweepers. In December it will be exciting again, as the team of FAUN Viatic (manufacturer for sweepers) will move to a new production plant at its production site in Grimma, where they will start production directly in the new year.

WITTE Tools was able to record an increase in sales of over 10% in the previous year. While incoming orders in the first half of 2022 were according to plan, the reluctance of customers to buy has been clearly noticeable since July 2022. However, WITTE Tools experienced a very positive customer response at the hardware trade fair in Cologne. This trade fair, which is so important for the business unit, finally took place again in September (after a four-year break due to the pandemic). Here, WITTE Tools presented its latest innovation in the professional tools sector: the new TOBI® Bit. It significantly reduces the risk of slipping

out of the matching screw head. With the TOBI® Bit, the screw head is held in place simply by placing it on the bit - without any magnetic forces. For the first time, WITTE Tools was also represented at the Expo Nacional Ferretera in Mexico. Furthermore, WITTE Tools was able to score points on the North American tool market with its particularly customer and service-oriented approach. Thus, the company was awarded the Operational Excellence Award for the best overall result in cooperation among suppliers by its long-standing customer, Matco Tools. With this award, Matco Tools honored the continuous, jointly developed quality improvement and optimization of products for increasing customer satisfaction. To further increase the competitiveness of the Hagen site, investments were made in a new 3C injection molding system with automation, in a 1C injection molding system with linear robot, and in the plant's infrastructure. The new 3C plant is not only technically state-of-the-art, but also promises energy savings in the overall system of at least 30%. Furthermore, WITTE Tools is planning a new modular tool concept.

KIRCHHOFF Mobility has adapted to new market requirements this year in order to be prepared for the ongoing transformation in mobility. The specially developed modular system for tailgaters has been revised, and a new, improved version of "Proline" has



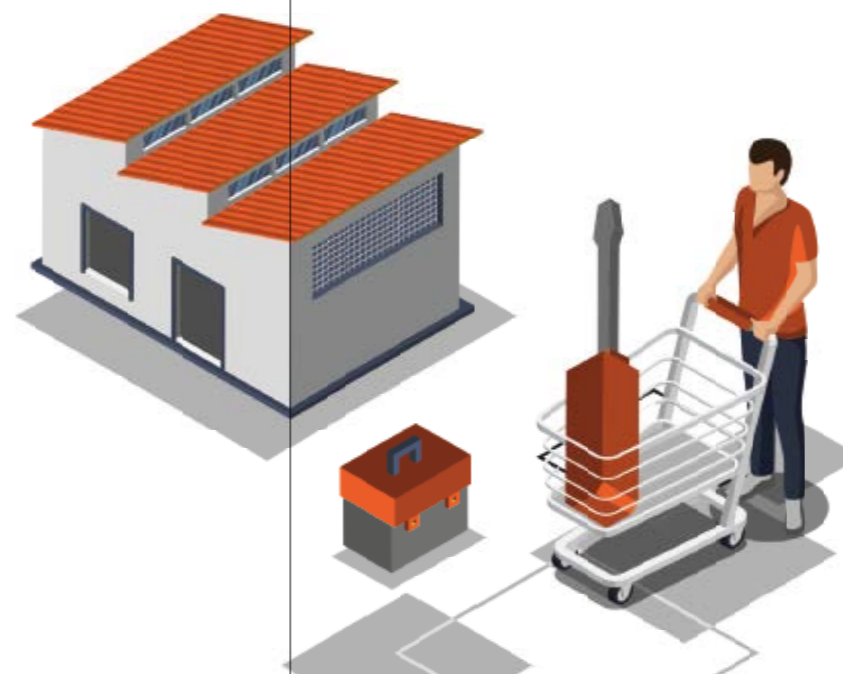
been established on the market. Further variants are in preparation. In addition, KIRCHHOFF Mobility has further optimized its customer service. New brochures and product information, designed in line with the content of the homepage, now offer customers the simplest and best possible overview of the products and conversion options. The new developments were successfully presented at various trade fairs and received a consistently positive response from customers. The mood was particularly good at the leading trade fair for this sector, REHACARE, in Düsseldorf in September. The rediscovered joie de vivre was literally palpable and the good discussions with customers encouraged us to look positively at the future. Furthermore, KIRCHHOFF Mobility has a high order backlog for 2023, which is partly due to the lack of new vehicles still to be converted. ■

Dear customers, friends of our company, and employees, the management of our group of companies would like to sincerely thank you for your loyalty, great commitment, and active cooperation. Thank you for your dedication and flexibility, which are especially important during these times. We look forward to a continued good and successful cooperation.

My sister, my brothers, our families and I, wish you and your families a merry Christmas and a happy New Year.

A hearty good luck to you.
Yours,

J. Wolfgang Kirchhoff



AUTHOR: STEFAN LEITZGEN
GLOBAL COO KIRCHHOFF AUTOMOTIVE

Three Years of the Pandemic... What Has Changed?

In December 2019, the outbreak of a new respiratory disease was officially confirmed in Wuhan, China. By March 2020, the WHO declared this disease (which until then had been classified as an epidemic) a global pandemic. Now, three years later, we would like to take stock. What has COVID-19 done to our employees, our way of working, and our company? What has changed temporarily and what will change permanently? What is the new normal now?

Working from home: Stefan Leitzgen, Global COO KIRCHHOFF Automotive, working in his home office with his dog, Forest.



Video conferences bring international teams together and facilitate collaboration on global projects.

At the beginning of the pandemic, in the winter and spring of 2020, many people were very unsettled or even scared. Images of military convoys transporting corpses, overcrowded hospitals, helpless doctors, and completely overwhelmed caregivers, were broadcasted in all types of media, shocking the world. A feeling of defencelessness against the new virus spread. The only way to reduce the speed of the infectious disease, which was spreading rapidly around the world, was to reduce the frequency of contact between people – with a lockdown. All public life came to a standstill. Everything that was not part of the narrow necessities of daily life was closed or banned. The most visible changes were fewer cars on the roads, hardly any contrails in the sky, and empty supermarket shelves. Of course, our factories and offices worldwide were also affected. Those who could had to work from home.

Thanks to the development and release of new vaccines in record time, after a three-year long pandemic, lockdowns are no longer necessary today. Vaccines, masks, and new drugs to protect against severe disease have made the virus manageable. Nevertheless, it will remain, just like other flu viruses. ➤



K>APP: the KIRCHHOFF Automotive communication app for all employees. It is a hub for global and local KA news, and was often the only source of information for our employees during the total lockdown.



Digital technologies, such as the use of smart glasses, help to reduce travel and improve response speed for support requests.



Hybrid meetings make it possible to exchange information across locations.

Fortunately, state interference in civil liberties is a thing of the past in most countries, and the individual's personal responsibility for his or her own health is once again in the foreground. Today, most people are no longer worried or scared, but have adjusted to life with the COVID-19 virus. A new normality, not much different from before the pandemic, has emerged.

For almost all our non-production staff, working life has changed permanently over the last three years. More home office, less commuting to the office, and fewer business trips have led to a new balance between work and leisure. This means more time for family and friends. Working hours have become more flexible, and making it easier to balance work and private life. There will be no going back to the situation before the pandemic.

Many business trips are now superfluous due to the use of digital technologies, such as web meetings or smart glasses. Less time in the car, a train, or a plane also means less CO₂ consumption, thus helping the company become climate neutral. Although these digital technologies would have been introduced

eventually, COVID-19 has accelerated their widespread use enormously.

Is everything better for our employees and company now, compared to three years ago? The pandemic has certainly fast-tracked many employees into a new world of work. This working world is definitely different from the one we knew for years. However, it is not necessarily better. Simultaneously attending a web meeting, writing emails, chatting with colleagues, and having kids frolicking around is not necessarily less stressful than being stuck in a traffic jam in the morning, or waiting for a delayed plane. As always, when things change massively in working life, everyone has to find their own balance anew.

So, what about our company? The financial losses have not endangered the solid balance sheets in the long term. However, it is still unclear whether and how the changes in the world of work will affect employee loyalty and company culture. The vast majority of employees have already experienced that in-person interactions with colleagues cannot be replaced by digital technology. Therefore, that is why our diverse KIRCHHOFF Culture Live activities will also survive the pandemic unchanged – we promise. ■

ONE OF US



” WITNESSING GLOBAL EXPANSION FIRST-HAND

Paul Dilworth, Global Executive Vice President Human Resources, is one of our longest-serving employees in North America. He has seen the company grow from a local business, called Van-Rob* at the time, to a global organization. Paul Dilworth started at the Canadian Aurora corporate location in 1998 as a HR consultant. Since then, he has worked his way through almost every possible position in HR, starting from HR consultant, to compensation and benefits specialist, to HR manager. Today, he benefits from these experiences and looks back: **"Not only have I seen the company grow, but I've also seen many of my colleagues grow from Van-Rob to today - it's the growth of the company, the people, and the opportunities that I'm most proud of."**

*From 1998 to 2011, KIRCHHOFF Automotive owned the majority shares in Van-Rob. In 2016, the company took over Van-Rob completely.

AUTHOR: SOPHIE RAMMERT
MARKETING ASSISTANT OF MANAGEMENT KIRCHHOFF ECOTEC

Three Years After Brexit – Where are We Now?

Since 2020, the United Kingdom has been struggling with delays in imports and exports in particular. Delays can last from days to weeks. The massive changes in the supply chain must be handled professionally. Finding alternative suppliers has been just one way to protect the supply chain. In addition, stock has been increased and crisis teams have been integrated. This was only possible as a team and with everyone's support; we noticed that in crises, the best solutions are developed internally.

Sean McDermott, managing director of KIRCHHOFF Automotive in Ireland, can only confirm the changes due to the new customs borders. Brexit has made the neighboring country a third country, which means costly customs documents and greater complexity, resulting in higher costs for doing business with the UK. For example, it is now cheaper to send a single pallet to Germany from Letterkenny in Ireland than to the UK. Furthermore, since Brexit, many companies are avoiding shipping across the UK

land bridge and are now shipping their goods directly from Ireland to mainland Europe – with many new routes to the Netherlands, France, and northern Spain.

Having mastered the challenge of Brexit, the United Kingdom faced another major change this year: the line of succession. The world mourned the loss of Queen Elizabeth. Almost four billion people watched the funeral. The British in particular are shocked. "It feels like grandma died," says Simon Hyde, Chief Executive Officer of FAUN ZOELLER UK, affirming the public's grief. However, Simon also sees a positive effect; the country has moved even closer together. King Charles is a supporter of tradition but also of change. He is tackling the modernization of the monarchy. ZOELLER UK looks forward to this development. King Charles is in favour of supporting businesses, new technologies, innovation, skills, and most especially, climate protection. "This will have a positive impact on hydrogen technology and the ENGINEUS BLUE- and CITYPOWER. The next few years promise to remain exciting," says Simon. ■

"Change" has been the keyword of the past few years. Brexit, the COVID-19 pandemic, and war are just a few events that have turned the entire global economy upside down. Acting quickly and responding to change is becoming increasingly important to help recognize risks early, identify solutions, and then carry out these plans.



AUTHOR: MICHAEL RANK
GLOBAL EXECUTIVE VICE PRESIDENT PROCUREMENT
KIRCHHOFF AUTOMOTIVE

Global or Local Sourcing?

The pandemic and current Ukraine conflict clearly demonstrates the dependency of our economic system and many industrial companies on global supply chains and their vulnerability. Since then, many states and industrial companies are increasing their efforts to reduce global dependency. In this context, de-globalization is often spoken of as the fourth megatrend alongside demography, digitalization, and decarbonization.

For many years, business and consumers have reaped the benefits of globalization and global sourcing. The international division of labor, the interconnectedness of production, and value chains have strengthened competitiveness, made products cheaper, and significantly increased global prosperity overall.

The pandemic and the Ukraine conflict exposed the dark side of these dependencies very clearly, not

least in the example of Russian gas supplies. Various states closed their borders, supply chains were interrupted, stocks were not replenished, many products became scarce, and consumer prices rose massively. The war in Ukraine and the economic sanctions against Russia have made the situation much worse. In particular, the drastic increase in energy prices for electricity and gas has led to significant increases in production costs. In some European markets, electricity prices have not only multiplied – even a basic



supply is difficult to secure. This will also present KIRCHHOFF Automotive with additional challenges in the coming year.

Against this backdrop, the importance of a functioning risk management system that evaluates and minimizes procurement market risks, while maintaining the competitiveness of our products, becomes very clear.

In this context, local sourcing is gaining in importance as an option compared to global sourcing. In contrast to global sourcing, local sourcing involves the procurement of goods from suppliers and procurement markets that are geographically close to our production site.

Compared to global sourcing, local sourcing has several advantages. Short transport routes and shorter delivery times are often associated with local

sourcing due to the geographical proximity and the associated lower transport costs. Also, in addition to logistical advantages and lower inventories, this often results in lower greenhouse gas emissions, which benefits the climate and environment.

Above all, however, supply bottlenecks occur relatively rarely with local sourcing. Shorter supply chains bring with them more calculable risks, greater flexibility, and shorter response times. Currently, it now has greater reliability and resilience to external influences.

Due to the increase in geopolitical tensions worldwide, the emerging shift of political axes, and global power blocs, the situation in some supply chains is expected to remain tense. In particular, a possible disengagement of the West from a Russia-China alliance would pose the risk of further and significant distortions in global trade and financial flows.

In order to safeguard our supply chains due to expected developments, we will place a greater importance on local and regional sourcing for our procurement strategy in the coming years. ■

AUTHOR: CLAUDIA SCHAUE
MARKETING & COMMUNICATION MANAGER FAUN GROUP

Colorful and Diverse

The logistics of tomorrow? Colorful, diverse and clean, if it is up to ENGINIUS.



From left to right: Arndt G. Kirchhoff, J. Wolfgang Kirchhoff, Hildegard Müller (VDA President), Dr. Johannes F. Kirchhoff, Patrick Hermanspann, Belit Onay (Mayor of Hannover) and Stephan Weil (Minister President of Lower Saxony)



CITYPOWER Facts

Total weight:	16 t
Drive type:	4 × 2
H ₂ -tank capacity:	max. 32 kg (700 bar)
Range:	~500 km WLTP
Prototype:	Ab 2023

- Also available as battery-powered variant available
- Based on the Atego chassis from Mercedes-Benz Trucks

"Innovative products from all exhibitors, very good technical discussions and an outstanding interest in the hydrogen trucks," this is the summary of shareholder Dr. Johannes F. Kirchhoff on this year's IAA TRANSPORTATION. With a new name and many clean drive solutions, the trade fair for the commercial vehicle and logistics industry presented itself as diverse and open-minded from September 20 - 25, 2022 in Hannover.

Visitors waited almost eagerly for new drive solutions in battery and hydrogen technology. And they were not disappointed. All the major OEMs and heavy commercial vehicle manufacturers showed low-emission and climate-friendly products. "Hydrogen has arrived in truck transport. All the major manufacturers showed at the IAA TRANSPORTATION, that in the future they are also clearly focusing on the fuel cell in the changeover to clean powertrains. Our H₂ vehicles have been in use throughout Germany for a year. To be able to witness this and help shape it is great!" says Paul Bruns, ENGINIUS Business Manager Hydrogen about his impressions during the IAA TRANSPORTATION.

For ENGINIUS, the hydrogen truck start-up of the FAUN Group, it was the debut at IAA TRANSPORTATION. Therefore, the rush and curiosity was great, because ENGINIUS is the first truck manufacturer in Europe with an EU type approval for electrically powered trucks with hydrogen fuel cell system (FCEV). In

addition to the battery-hydrogen chassis ENGINIUS BLUEPOWER, the CITYPOWER celebrated its premiere in Hannover. CITYPOWER is based on the Atego from Mercedes-Benz Trucks. The two-axle truck offers a lot of potential: With nine tons of payload, a range of 500 km (WLTP) and a refueling time of thirty minutes, the CITYPOWER is an emission-free and low-noise replacement for diesel vehicles, without having to sacrifice installation space, performance and range. A maximum of 32 kg of hydrogen can be carried. It is refueled at 700 bar. The first vehicles will go into field testing at the end of 2023 and series production is scheduled to start in 2024. FAUN CEO Patrick Hermanspann: "Our trucks are on the road where children play and families live. We want to help to create a better and cleaner world. That's why it's important for us to implement carbon-neutral truck transport." ■



www.ENGINIUS.de

AUTHOR: MARKUS LÖCKER
TECHNOLOGY DEVELOPMENT SPECIALIST KIRCHHOFF AUTOMOTIVE

Reducing CO₂ Through Induction in Press Hardening

Energy by induction – this not only works at home on the stove, but can also work on a hot forming line. "We have already accompanied the first research projects on inductive heating from 2010. During the process, we successfully heated the head area of our B-pillar using induction in 2019, and then formed it in our B-pillar mould," Markus Löcker, technology development specialist at KIRCHHOFF Automotive, explains.

Together with the German University of Paderborn and other companies, KIRCHHOFF Automotive would like to bring the inductive heating of moulded blanks for press-hardened car body components to series production readiness. This could avoid a great deal of CO₂ emissions. Markus Löcker, technology development specialist in Attendorn/Germany, is part of a research team working on the development of this process.

Hot forming has been an integral part of our manufacturing technologies portfolio for 15 years. This process can be used to produce high-strength and very lightweight body parts. If such parts are installed in the vehicle, it has a significantly lower weight, which saves CO₂.

That sounds good initially. However, the production of press-hardened parts causes high emissions. "In the industrial press hardening process, sheet metal blanks are usually heated in ovens up



Kick-off event at the German University of Paderborn in summer 2022. Ninth from right is Markus Löcker, technology development specialist at KIRCHHOFF Automotive. **Left:** A glimpse into a hotforming line at KIRCHHOFF Automotive.

to 40 meters long. In order to bring these ovens to a temperature of 950 degrees Celsius, fossil fuels are usually necessary," explains Prof. Dr. Thomas Tröster, holder of the Chair for Lightweight Automotive Construction (LiA) at the University of Paderborn, and board member of the "New Mobility Paderborn" (NeMo) initiative.

The project team is now researching a method of inductively heating blanks during press hardening. This works like cooking on an induction stove: electrically conductive bodies (like the cooking pot on the stove, or the blanks during press hardening) are heated with the help of an alternating magnetic field. Current flows through a coil (inductor) and generates the magnetic field. The magnetic effect induces eddy currents in the material, causing it to heat up.

"In another research project with various project partners, we are developing innovative sheet metal coatings that can be heated by induction. The AlSi (aluminum-silicon) coatings currently used do not allow complete heating by induction because they require a diffusion time at certain temperatures," Markus Löcker further explains. If press-hardened parts are heated by induction, regenerative generated electricity can be used for this purpose, thus saving emissions. Additionally, high temperatures can be reached faster and more effectively than before. At the end of the process, vehicles can be manufactured in a more environmentally friendly and efficient way. Another advantage of an induction heating system is the space requirement – compared to the roller hearth furnace, approximately 55% can be saved. ■

"Green" Steel

AUTHOR: UWE HADWICH
GLOBAL DIRECTOR PROCUREMENT KIRCHHOFF AUTOMOTIVE

Steel is a major component of our products and is responsible for around 90% of our company's CO₂ emissions. In the future, we will increase our use of green steel as a raw material for the production of our metal structural parts.

In the production of steel, most CO₂ emissions are generated in the reduction of iron ore to pig iron, which is carried out with coking coal. These are also reflected in the Product Environmental Footprint (PEF) of our products. The PEF measures the sustainability performance of a product during its lifecycle.

However, there is a more environmentally friendly method of reduction – using green steel. It is produced using hydrogen instead of coking coal to reduce the iron ore. This makes the steelmaking process CO₂-neutral, as only water vapor is released into the environment during the reduction process.

The range of green steel on offer is diverse. Basically, a distinction is made between certified and green materials. Depending on the product, the CO₂ reduction varies between 10 and 100 percent. Green certified steel is usually a conventionally produced steel that is made "green" by certificates: steel mills generate these certificates by saving CO₂ on a wide variety of equipment.

Currently, KIRCHHOFF Automotive sources green steel primarily from certified steel. "Pure green steel is currently only available in very small quantities. But, we are currently in the process of securing our requirements with actually produced green steel, starting in 2026," explains Uwe Hadwich, global director of procurement.

At present, customer requirements in this respect still vary greatly, but the trend is clearly moving in the direction of processing green steel. OEMs are placing increasing emphasis on maximizing the PEF of their own products. To this end, they are requesting data on recycling, energy, water, and greenhouse gases from their suppliers. Using green steel makes products more environmentally friendly, but currently, also more expensive. "The cost of green steel will be roughly based on the European Emissions Trading Scheme (ETS)," says Uwe Hadwich. At the moment, the first customer inquiries have already been received requesting the use of green steel. ■

Our Company History in Pictures

AUTHOR: PROF. THOMAS F. KIRCHHOFF
CULTURAL OFFICER OF THE KIRCHHOFF GROUP



With great pride and joy in Vinovo, Italy, the employees of FARID, a company belonging to KIRCHHOFF Ecotec, present their picture.

In KIRCHHOFF Culture Life's latest campaign, employees create large-format pictures that include many details of the company's history, and landmarks of the respective plants and regions. The results are always a surprise and evoke admiration and pride among the participants.



Since 2017, **KIRCHHOFF Culture Life** has been a Europe-wide cultural program by our company for the workforce and their family members. In addition to promoting in-house sports activities and supporting local sports clubs, we also want to offer employees and their families cultural events of a special kind. At regular intervals, we organize a variety of cultural and participatory events - a wide-ranging program of music, literature, theatre, concerts, exhibitions, competitions, and other activities. Extraordinary artists accompany the events. The result is more than surprising and causes a lot of joy, admiration, and pride among the participants.

In "hard facts and figures", the impact of the initiative conceived and led by Prof. Thomas Kirchhoff is perhaps not measurable. However, together with the other "work-life balance" measures, an effective mix is created here as a "soft factor" of employee retention.

Each picture features elements from the company's history, such as Iserlohn, the ridgeline of the old Stephan Witte & Co. building, where the first pressing and punching plant was built in 1894. Another motif is a man holding a large sewing needle, representing the beginnings of the KIRCHHOFF Group.

At first, the participants did not know what to expect. They were invited to a "big surprise afternoon with music and art", which promised fireworks of the senses, a feast of emotions, and surprising participation. These events took place at KIRCHHOFF Automotive in Iserlohn (Germany) on May 29, at FAUN in Osterholz-Scharmbeck (Germany) on September 11, and at FARID in Vinovo (Italy) on September 23, 2022.

The respective task was to paint sixty 80 x 80 cm canvases in teams of two, inside pre-drawn black lines. The lines were not to be painted over. Put together, these canvases make large-format pictures of almost 50 m². Many elements from the company's history can be seen on them, such as Iserlohn, the ridgeline of the old Stephan Witte & Co. building where the first pressing and stamping plant was built in 1894. Or, a man with a large sewing needle in his hand, representing the beginnings of the KIRCHHOFF Group. In the picture in Osterholz-Scharmbeck, you

can see an old pump truck, a Rotopress, and the new hydrogen-powered ENGINIUS vehicles. Landmarks of the respective region where the plants are located can also be seen in the pictures: Vinovo, Italy, the Alps, the Basilica di Superga, and the Mole Antonelliana, among others.

Recognizable features are three large trees representing the brothers Arndt G. Kirchhoff, J. Wolfgang Kirchhoff, and Dr. Johannes F. Kirchhoff. They also stand for the company's values: respect, sharing knowledge, honesty, and trust. This also refers to the KIRCHHOFF Culture Life tree planting campaign, where 1,785 trees are to be planted at all company locations.

The pictures painted by the employees and their families were hung in prominent places in the production halls. It is worth taking a closer look! ■



An unforgettable moment for the young and old.



Accompanied by live music, the painting activity was twice as fun.

More Than Just a Pastime

AUTHOR: EVA RADEMACHER
COMMUNICATION & MARKETING SPECIALIST
KIRCHHOFF AUTOMOTIVE

Family days are an integral part of the KIRCHHOFF Automotive corporate culture. This is because they not only provide entertainment for employees and their families, but also strengthen the sense of community. The joy of this opportunity for a relaxed get-together is especially welcome after a two-year break due to the pandemic. This can be seen in the pictures from our plants in Germany and Poland.



An oldie but a "goldie". FAUN retirees take a picture with their former boss in the middle.



"Originally we wanted to stay for two hours, but it turned into five. That says it all!" says Jolanta Becker, KAPS expert administration in Attendorn.

On Family Days, the respective on-site organization team always puts together a varied program with attractions for young and old. This year's highlight in Iserlohn was the meet and greet with ice hockey and basketball stars from the Iserlohn Roosters and Iserlohn Kangaroos respectively; KIRCHHOFF Automotive is the main sponsor of both teams. In Mielec, Poland, among other things, a "robot fight show" with lightsabers à la Star Wars impressed the guests.

Many colleagues took the opportunity to show their family members their workplace. "My children's reaction when visiting the place where their father disappears for several hours every day was simply priceless," says Michał Muszyński, lean manufacturing specialist in Gniezno. ▶

A dream for the young and old: driving a refuse collection vehicle.





For once here, no rubbish trucks were coloured, but the FAUN history was captured pictorially.

For many, the bond with the company goes beyond its function as an employer - there is also a bit of pride involved. As a result, many former employees who have since retired also enjoyed coming back to their old workplace to see what has changed.

Also at the refuse collection vehicle manufacturer FAUN in Osterholz-Scharmbeck, many new and old acquaintances met at the old acquaintances met at the family day on September 11. 1,300 curious visitors had set out, halls and offices away from the daily

Impressions of the KIRCHHOFF Automotive family days at our European locations.



The FAUN ZOELLER UK team celebrated with a Hawaiian-themed event.

work routine. Another highlight of the day was the painting activity as part of KIRCHHOFF Culture Life. A 16 x 4 m work of art, created by by employees and their families, is now the eye-catcher in the cafeteria.

Things got exciting during family day at the FAUN ZOELLER UK summer party in Redditch. With a Hawaiian theme, the team and their families came together for a few fun hours. Catherine Kings, assistant of the executive board, was happy with the turnout: "It was great! We had to postpone the party twice, but we were so happy to see everyone, even the rain didn't matter."

The Family Days show that we all belong to one team - whether active or former employees, at the company headquarters in Germany, or in one of the other ten countries where KIRCHHOFF Automotive plants are located. ■



New Products on the Road

AUTHOR: SABINE BOEHLE
COMMUNICATON AND MARKETING MANAGER KIRCHHOFF AUTOMOTIVE

KIRCHHOFF Automotive offers body solutions that make tomorrow's mobility safe. The elimination of the combustion engine has changed e-vehicles' force application and force distribution in the event of a crash. Without an adaptation of the car body, the consequences of a collision can be dramatic. Therefore, our focus is on the development of resource-saving and crash-relevant body structure parts in lightweight construction for combustion engines and e-vehicles.



LiXiang L9 – Cross car beam, front and rear aluminum bumper

Technologies

Forming, aluminum extrusion, cutting, bending, riveting, CNC machining, MIG welding, heat treatment, washing, assembly, clinching (dashboard beams)

Production plant

Suzhou/China

Capacity/year

450,000

Customer/Model

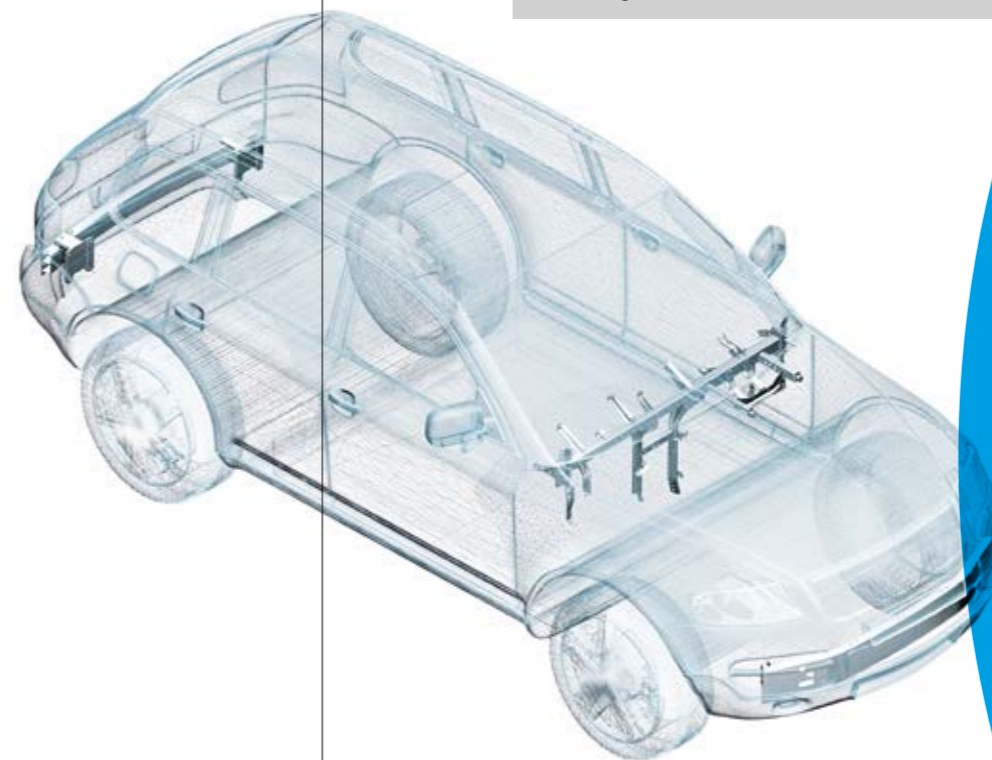
LiXiang L9

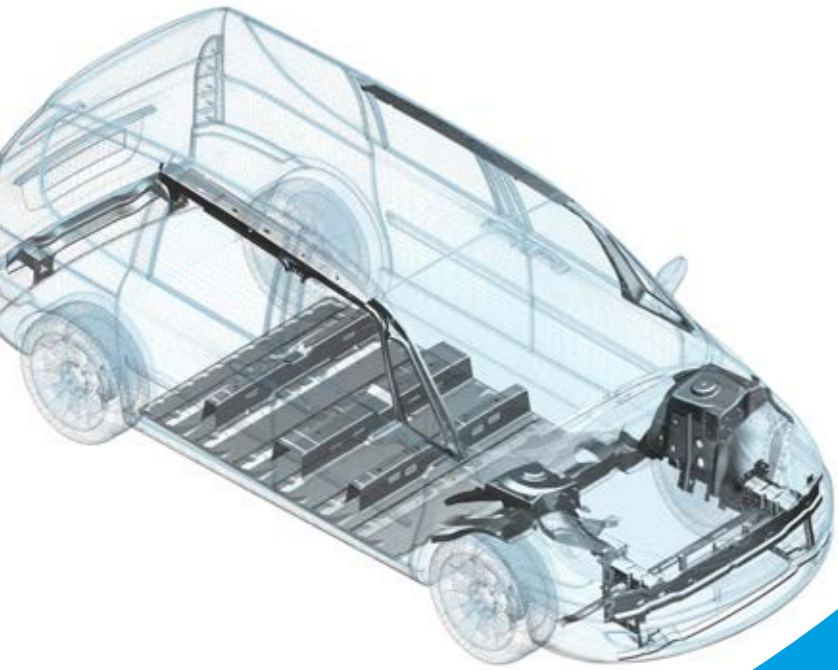
A Smart Luxury Flagship SUV for Families

KIRCHHOFF Automotive also ensures safety in the new **LiXiang L9**. The luxury SUV with six seats is a space miracle and offers extremely comfortable space for many occupants.

In addition, the interior, multimedia equipment, and safety have been improved. The luxury SUV not only meets the highest safety standards of the C-NCAP (China-New Car Assessment Program) and the C-IASI (China-Insurance Automotive Safety Index), but also achieves the highest rating on both sides of the small offset crash.

KIRCHHOFF Automotive was able to contribute to these good results with its experience in lightweight construction and crash safety management for electric vehicle bodies. For the LiXiang L9, we developed the all-aluminum front and rear bumpers, as well as the cross car beam. The aluminum bumpers not only contribute to a lighter body, but also effectively absorb the impact energy in a front or rear collision, providing the best possible protection for the occupants. The development of the all-aluminum cross car beam required a high level of design and manufacturing skills. Several design adjustments had to be made to meet the tight tolerances required to safely hold two large LED screens, while reducing the weight and improving the rigidity of the front structure.





VW ID. Buzz – Crash Management System, seat crossmembers, wheel arches, battery underride protection, A-pillar top, roof frame reinforcement

Technologies

Hotforming (for seat crossmembers with downstream sandblasting), forming, MAG welding, spot and projection welding, riveting, e-coating

Production plants

Mielec, Gliwice/Poland;
Attendorn, Iserlohn/Germany

Capacity/year

95,000

Customer/Model

VW ID. Buzz

A New Era: Cult Bulli Becomes ID. Buzz

The design of the new **ID. Buzz** was inspired by its iconic Bulli predecessor, and rounded off with modern proportions and innovative technology. The ID. Buzz presents itself as a multifunctional all-rounder with e-drive and a range of approx. 400 km.

With the underride protection for the ID. Buzz as well as for other models of the VW MEB platform, KIRCHHOFF Automotive supplies a component in series production for the first time, which in the end forms the battery module together with other components. The aluminum underride guard is produced at the Iserlohn plant in a single production flow - from washing to laser welding to packaging. To make this possible, our manufacturing engineering team developed an appropriate lean layout. The result is a manufacturing concept that represents an automated one-piece flow process over approximately 1,000 m². The laser-welded assembly is manufactured in three sizes, from five or seven individual aluminum components.

Furthermore, KIRCHHOFF Automotive supplies the ID. Buzz seat crossmembers in a new, high-strength CR1900 material quality after hot forming – a material quality already introduced in the other vehicles of the VW MEB platform as a world first in series production. Other hot-formed structural parts that we produce for the ID. Buzz are the top A-pillars and roof frame, as well as safety-relevant crash components such as the specially developed rear and front bumper crossmembers. For the body-in-white structure, we manufacture the front left and right wheel arches at our site in Attendorn, Germany.



Mercedes-Benz EQS SUV – Reinforcement closing eye, A-pillar, side member, A-pillar bracket, connecting plates, reinforcing plates, strut

Technologies

Forming, spot welding, projection welding, bonding, assembly of dampers

Production plants

Manchester, Atlanta/USA

Capacity/year

55,000

Customer/Model

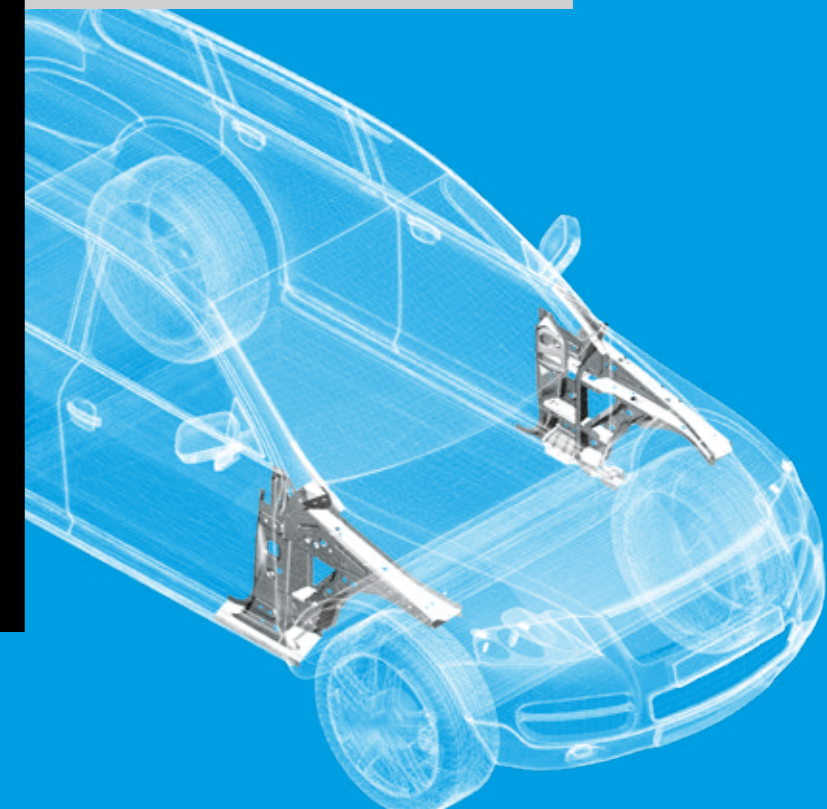
Mercedes-Benz EQS SUV

Mercedes-Benz Presents the First E-SUV With the EQS

As the third vehicle of the newly developed all-electric platform, Mercedes-Benz EQ is now releasing the **EQS SUV**. The model is built exclusively for the global market at the Tuscaloosa (Alabama) plant in the USA. KIRCHHOFF Automotive is supplying a range of different welded assemblies and pressed parts for the body shell of the vehicle.

The production of all individual parts is handled at the Manchester site in Tennessee (USA). For this purpose, 15 tools have been commissioned on different forming presses. Depending on the vertical range of manufacture, the parts are delivered directly to the customer's plant or transported internally to the newly established location in Atlanta (Georgia, USA).

A team there has been working on the industrialization of the project since the beginning of 2021. The most complex products include the A-pillar and the side member. For both components, several pressed parts are welded and joined with a single-component structural adhesive, while maintaining tight tolerances to accommodate the headlights in the vehicle.





Ford F-250/F-350 – Cross Car Beam

Technologies

Forming, projection welding, MIG welding

Production plants

Waverly, Ohio; Manchester, Tennessee/USA

Capacity/year

333,000/63,000 (HUD version)

Customer/Model

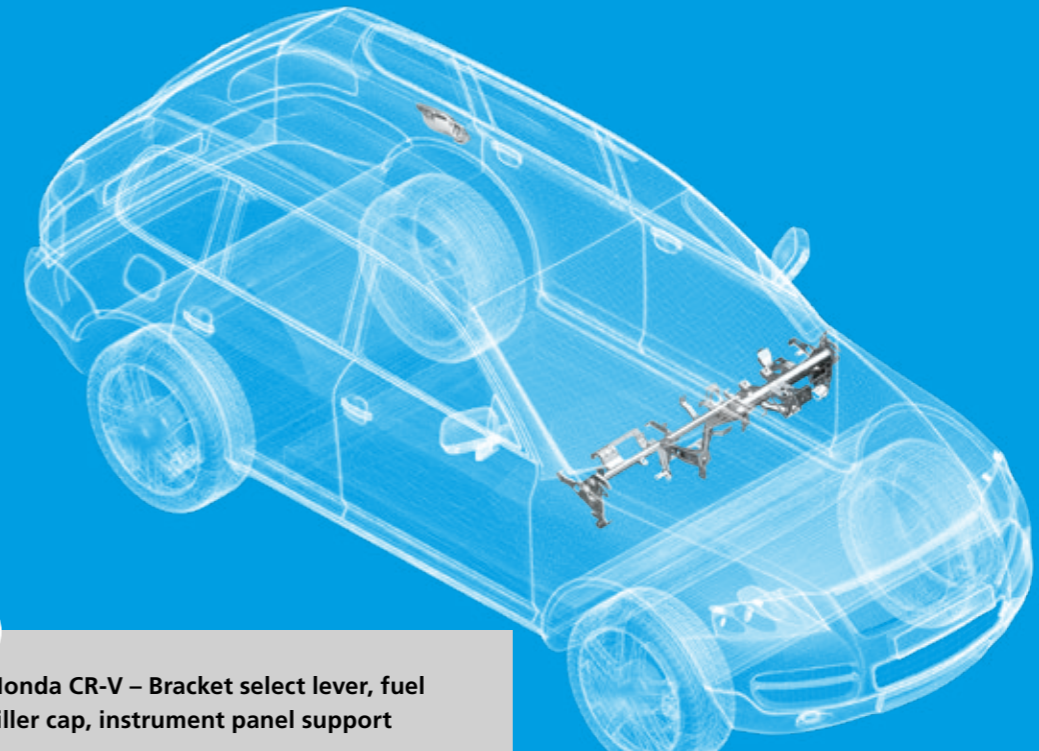
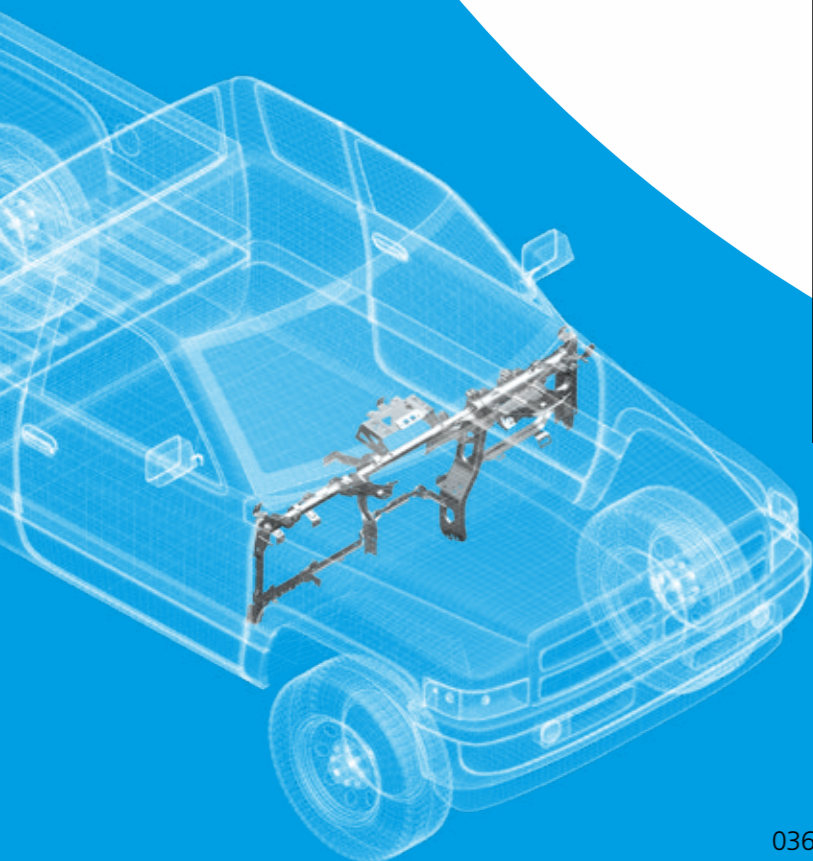
Ford F-250/F-350 Super Duty

Cross Car Beams for the Best Selling Vehicle Models

For a decade, we have been supplying Ford with our cross car beams (CCB) for the high-performance **Ford Super Duty F-250 and F-350** models. For the new 2023 model, which will be introduced to the public in December, we produce two unique cross car beams: a base version for the majority of the vehicles, and a HUD (Head-Up-Display) version which will display several of the instrument panels items onto the windshield.

The current CCB has been made in Tecumseh, Michigan (USA) for the past decade. The new CCB models will be built and assembled in Waverly, Ohio (USA) with the stampings being supplied by our Manchester, Tennessee facility.

The Ford Super Duty F-250 and F-350 trucks are among the most reliable vehicles for heavy-duty operations. This has made them the best-selling vehicle models in the USA for several decades. Their extra strong chassis and suspension components allow for increased payload and towing capacity.



Honda CR-V – Bracket select lever, fuel filler cap, instrument panel support

Technologies

Bracket, select lever: Forming, spot welding
 Fuel tank cap: Punching, projection welding, gluing
 Instrument panel support: punching, MIG welding, projection welding, assembly

Production plants

Bracket, select lever: Aurora, Canada
 Fuel tank cap: North York, Canada
 Instrument panel support: Aurora, Canada / Waverly, USA

Capacity/year

bracket, select lever: 438,000
 Fuel filler cap, instrument panel support: 535,000

Customer/model

Honda CR-V

Waverly Joins North American Supply of the Honda CR-V

The first **Honda CR-V** (Compact Crossover SUV) was launched in 1997. The SUV is particularly popular with families, as it is considered an affordable and compact alternative to larger SUVs. Up to now, only the KIRCHHOFF Automotive plant in Aurora (Canada) has supplied fuel filler caps and instrument panel supports to Honda's plants in Marysville, East Liberty, and Indiana (all in the USA). The production of the instrument panel support for the latest CR-V model marks the first time that the North American site in Waverly (USA) has entered the supply of American Honda sites.

The bracket for a selector lever was the first product belonging to the new body-in-white assembly that Honda recently commissioned us to manufacture. On this component, our customer and factory teams successfully implemented several technical changes, which actually exceeded the customer's expectations. As a strategic supplier of fuel caps to Honda, we have extensive experience in the development phase of this product; hence, we were confident in performing a smooth start-up and the implementation of series production at our plant in North York (Canada). The fuel filler cap is one of our few products for an OEM that is visible to the outside world.





Perfect Teamwork

At the KIRCHHOFF Automotive plant in Shenyang, China, the product ramp-up of the BMW X5 front-end module got off to a successful start. The perfect start-up of this complex project during the pandemic was only possible thanks to the very good support of the global corporate network.



There is smooth machine adjustment thanks to VR glasses. Here, Jonathan Wu, stamping maintenance supervisor in Shenyang, China, uses the data glasses to get online advice from a specialist.

Left: With the new 1,600 t servo-transfer press, high-strength multiphase steels can now also be processed at our Chinese plant in Shenyang. **Below:** Clearly recognizable: the darker roof area marks the extensive factory expansion.



AUTHOR: ARMIN BERTHOLD
GLOBAL EXECUTIVE VICE PRESIDENT MANUFACTURING ENGINEERING
KIRCHHOFF AUTOMOTIVE

At the end of 2019, KIRCHHOFF Automotive received the order to produce the front-end module of the BMW X5 in Shenyang, China. This new project required several measures at once: an expansion of the local production and logistics area by 4,275 m², and the installation of a new 1,600 t servo transfer press to realize this order.

During the planning phase, several teams worked in parallel. One team dealt with the planning and realization of the buildings, as well as the procurement of the 1,600 t servo transfer press. Another team was responsible for the product-related tooling and joining equipment. This started with a lessons learned workshop at our Manchester, USA site.

In 2019, a face-to-face meeting on site was still possible. Thus, 15 engineers from our sites in Shenyang (China), Mielec (Poland), Attendorn (Germany), and Aurora (Canada) came together to analyze the ongoing US production of the front end for the BMW X5 (G05) in Manchester. All the knowledge gained was incorporated into the realization of the new forming tools and joining

equipment. Further planning and design discussions in 2020 were only carried out online.

In the course of the workshops for the buildings, the team analyzed the complete plant material flows and transferred them to an optimized new layout.

For about one year, high-strength multiphase steels could be processed at our Chinese plant in Shenyang, with the start-up of the new 1,600 t servo transfer press. It will also be used for the new BMW X5 front end. To join the individual component parts, we rely on joining techniques and MIG welding for aluminum and riveting in robot-guided processes.

At the end of 2021, together with the customer BMW, we were able to carry out the acceptance successfully and according to schedule. The vehicle then hit the road in April 2022.

Jimmy Gu, the plant manager in charge, is very pleased with the successful new startup: "With my team in Shenyang and the very good support of the global KA network, it is possible to implement such complex projects under these pandemic circumstances." ■

AUTHOR: SABINE BOEHLE
COMMUNICATON AND MARKETING MANAGER KIRCHHOFF AUTOMOTIVE



Three Successful Trade Show Appearances

The Perfect Atmosphere

The motto of our trade show appearance at the IZB from October 11 to 13 in Wolfsburg was MAKING.MOBILITY.SAFE. After four years, this largest trade fair for suppliers was held again with 940 international suppliers, attracting more than ever before to Volkswagen's home town.

KIRCHHOFF Automotive presented its latest innovations and solutions for e-mobility. The economical lightweight products ensure that even in the vehicles of the future, people are optimally protected in the event of an accident. The best example: an aluminum underride guard for the VW MEB platform. With this product, we are (for the first time) supplying a component in series production, that, together with other components, ultimately forms the battery module and protects it.

Johannes Schauf, director of sales for VW, drew a positive conclusion: "The discussions with our customer testified to mutual trust and common objectives. Our open stand, the way we presented ourselves, and the atmosphere we were able to create was a perfect fit." ▶



01+04 For the first time at the IAA Transportation, KIRCHHOFF Automotive presented its body solutions for commercial vehicles together with Ecotec. Read more on pages 18 and 19. **02+03** "The BMW Supplier Conference is the perfect platform for making contacts," summed up Piotr Kuter (resident program manager) and Rajesh Tagore (engineering manager). Together with Martin Mayotte (sales director) and Robert Leone (communication and marketing specialist), they represented KIRCHHOFF Automotive at the supplier conference.

Successful networking

The BMW Supplier Conference on September 1 in Greenville, South Carolina, USA provided the perfect platform for making contacts and exchanging ideas. KIRCHHOFF Automotive was one of more than 2,000 attendees who participated in the event, networking with others and establishing contacts with Tier 1 suppliers. "We are proud to have participated in the event again this year, together with our customer," summed up Piotr Kuter (resident program manager) and Rajesh Tagore (engineering manager), who were on site together with Martin Mayotte (sales director) and Robert Leone (communication and marketing specialist). In various breakout sessions, our team was able to get inspired and exchange ideas with customers and suppliers.

Many interested guests learned about our manufacturing processes and products, such as front ends, bumpers, front axles, and crash management systems, which showed our contribution to the different vehicle models of the manufacturer.

Successful premiere

For the first time, KIRCHHOFF Automotive and KIRCHHOFF Ecotec made a joint trade fair appearance at the IAA Transportation in Hanover from September 20 to 25, 2022 – it could not have been more successful. "We thank you for the super cooperation with our young ENGINIUS team! Our hydrogen start-up amazed the trade show world and we were able to inspire many customers and visitors with our body solutions for the mobility of the future (MAKING. MOBILITY.SAFE.)," says Andreas Heine, global EVP of communication and marketing. Central topics at the world's largest mobility event were climate protection, alternative drives, digital networking, and concepts for the growing delivery traffic in cities. With ENGINIUS (the new brand for hydrogen trucks from KIRCHHOFF Ecotec), our group of companies had an absolutely unique selling point at the trade fair. The hydrogen vehicles with fuel cells are currently the only ones with a European type approval. Around 30 waste collection vehicles are already in daily use in many cities in Germany, largely without noise and emissions. Interest in the joint stand was correspondingly high. Lower Saxony's Minister President Stephan Weil and the President of the German Association of the Automotive Industry (VDA) Hildegard Müller also came to find out more, along with many accompanying journalists.

Around 1,400 exhibitors from 42 countries presented their innovations in the field of transportation and logistics at the IAA Transportation in Hanover. ■

ONE
OF
US



” AWARDED FOR ACHIEVING TOP MARKS

"Super job Leon, congratulations on being awarded the best trained industrial electrician in NRW. We're glad you're staying with us!" says his trainer, Michael Isphording. Leon Schmidt completed his industrial electrician training at our Attendorn plant in the summer, passing with a grade of "very good". Due to his excellent performance, the 16 chambers of industry and commerce in the state of North Rhine-Westphalia also recently honoured him as the best in his training profession. Leon Schmidt now works as an electrician at our plant in Attendorn. "In the course of my training as an industrial electrician, I realised very quickly that this field is just right for me," he says. In the summer, Leon Schmidt is planning to do part-time further training to become an electrical engineer. We wish him continued success as he pursues this!



The Factory Concept is Decisive

AUTHOR: CORINA MANDĂ
 ASSISTANT OF PLANT MANAGER
 KIRCHHOFF AUTOMOTIVE

Two new projects will start up at the KIRCHHOFF Automotive plant in Craiova, Romania. They will begin in the next few years after the end of parts production for the Ford Ecosport B515. For a smooth start-up, the plant layout will be extensively redesigned.

Left: Cristina Tuta (production manager) and Ștefan Stancu (maintenance manager) review the project plan for relocating the equipment. **Right:** Welding cells must be repositioned, among other things, for the complete restructuring of the factory concept.



This redesign is a crucial aspect in the launch phase of new products. "Only a well-designed plant layout can ensure a smooth and fast flow of materials, from raw material to finished product," explains Bogdan Balaci, plant manufacturing engineering manager. "Workstations must be easily accessible, and movements and effort must be kept to a minimum. The layout of the production equipment affects the efficiency of production. Therefore, when planning a new plant as well as optimizing existing plants, the aim is to arrange machines, processes, and plant services in the best possible way. The goal is lean production to ensure the right quantity and quality in production at the lowest possible manufacturing cost."

The team in Craiova has been working on the design for the new plant layout since the beginning of 2022. This includes identifying spare/service parts that the customer Ford can still order for a certain period of time after the EOP of the Ford Ecosport B515. It also involved looking at which manufacturing cells could be reused to produce the new projects, and which stations would be responsible for producing the spare parts.

In theory, relocating a welding cell seems simple. In practice, however, it means a lot of work for everyone involved. For the employees in Craiova, this was the first step in redesigning the plant layout. Within three days, the relocation of the welding cell took place with the support of an external service provider.

This was followed by the plant's biggest layout change to date. A dozen workstations had to be relocated to adjust the layout of the production lines for a new project starting in 2023. "The biggest challenges here were to efficiently deploy workers to the repositioned workstations, and optimize the movement of employees and materials between operations. In doing so, it reduces material handling costs and increases productivity. But it also includes easy monitoring and maintenance, efficient use of available space, and safe working conditions," says Robert Lică, process engineer. "Moving the manufacturing cells to their new positions was particularly difficult, given the size of the cells and the space available." In all, five teams of engineers, technicians, and setters, from maintenance, production, and engineering, were involved.

"The plan was ambitious and put pressure on the project teams. But their reliability and professionalism ensured that all tasks were successfully completed and production started on schedule," says Ștefan Stancu, head of maintenance. ■

What are Digital Twins?

The Digital Manufacturing Platform (DMP) and Digital Twins are essential components for an intelligent digitization. They help us to overcome challenges in day-to-day business more quickly and thus to work more efficiently.

AUTHOR: MARCEL KLEIN
GLOBAL DIGITALIZATION MANAGER
KIRCHHOFF AUTOMOTIVE

If you look at everyday production in the plants, it quickly becomes clear how different departments, systems and components interact with each other. Every day, we need to master new and very different challenges.

Today, every department already uses data from a wide variety of systems for this purpose. However, the ongoing digitization in production has made another, more valuable tool available: the data of the "things" themselves. The definition of a thing is deliberately kept open and ranges from a large press with its individual parts to an intelligent screwdriver.

Does the press motor run without imbalance, so that we do not have to fear any failure? When does the next cap change have to be made on the welding robot? What about tool wear so that we can effectively plan the next maintenance?

We would like to be able to answer such questions even better and faster in the future. For this purpose, we are using our Digital Manufacturing Platform. It helps us to create "Digital Twins" of the machines, which provide even more detailed insights into the inner workings and condition of all components. The insights gained from this data are available on an ongoing basis and integrated into daily processes in order to overcome even unforeseeable challenges - or prevent them from arising in the first place. ■

AUTHOR: SABINE BOEHLE
COMMUNICATON AND MARKETING MANAGER
KIRCHHOFF AUTOMOTIVE



Above: For the first time, the KIRCHHOFF Automotive Supplier of the Year Award ceremony took place as a hybrid web conference. **Right:** CEO J. Wolfgang Kirchhoff and the procurement board members congratulate the suppliers of the year.



The Best of the Best

For two years, we suspended our in-person awards for our suppliers of the year due to the pandemic. In June, KIRCHHOFF Automotive adapted the format of the event to continue presenting its Supplier of the Year Award (SOY), now as part of a festive web conference.

The German mechanical engineering company ARKU was pleased to receive the award as best supplier in the Capital & Tooling category, Poland's GRUPA KETY in the Bought In Parts category, and the Korean steel group POSCO as best supplier in the Raw Materials category.

"Particularly in these difficult times, we were able to rely fully on the suppliers who received awards today," said Klaus Lawory, vice president of procurement, praising the good and trusting cooperation. Additionally, he said outstanding quality, high delivery reliability, and a high degree of further development and technological progress were decisive criteria for the selection of KIRCHHOFF Automotive SOYs.

A purchasing relationship of more than 20 years characterizes the cooperation with Arku Maschinenbau GmbH from Baden-Baden, which was recognized for its outstanding performance in the Capital & Tooling area for the supply of conveyor systems. Arku is now represented in the KIRCHHOFF Automotive plants with 40 installed conveyor systems (decoiling lines) on all three continents.

KIRCHHOFF Automotive has been working with Polish Grupa Kęty, which has supplied us with

aluminum extrusions since 2014. Since then, we have purchased a total of several million parts for our customer programs from the SOY – their quality, delivery reliability, and service have always been impeccable.

The Korean steel group Posco, which has won awards for the highest quality in raw materials, is one of the largest steel manufacturers in the world. The cooperation began in 2006 with the supply of the then newly founded KIRCHHOFF Automotive plant in Suzhou, China. Since 2015, Posco has also been supplying us at other locations beyond China.

During the web conference, the three honorees not only provided information about their core competencies and future plans, but also demonstrated a great deal of creativity in presenting their collaboration with KIRCHHOFF Automotive. For example, Arku showed some nostalgic photos of the beginnings of our collaboration - and earned some laughs on the side.

Even though there were always face-to-face awards in different countries from 2009 to 2019, the current format as a web conference was very much welcomed and positively received by all participants, even despite the time difference for Posco executives in Seoul (South Korea). ■

REHACARE 2022: Innovative Aids and Solutions for People with Disabilities

AUTHOR: ALEXANDRA BRABENDER
COMMUNICATION & MARKETING SPECIALIST KIRCHHOFF MOBILITY



ProLine vehicle conversion for the Caddy 5. **Below:** Depending on the restriction, a vehicle adaptation for the disabled also includes the EasySpeed hand control unit, which assists with accelerating and braking. There is also the Turny Evo swivel lift seat, which helps with getting in and out of the vehicle or transferring from a wheelchair to higher vehicles.



From September 14-17, 2022, KIRCHHOFF Mobility presented its specially developed ProLine modular system for the new Volkswagen Caddy 5 at REHACARE. Handicapped-accessible conversions for current and future high-roof station wagon models are based on this rear cut-out kit, which is developed in-house. For the conversion kit for the new Caddy 5, KIRCHHOFF Mobility Ingenieure was able to optimize the use of materials and the manufacturing process. A mechanically folding ramp allows the wheelchair user to comfortably reach the rear of the vehicle, where there is sufficient space to securely fasten their wheelchair. This avoids strenuous repositioning.

Fair visitors and exhibitors were pleased about being able to interact in-person again. KIRCHHOFF Mobility customer consultant Rolf Mättig found the interaction at the trade fair very pleasant: "It was simply nice to be able to exchange ideas with customers and suppliers in person again, and to see familiar faces." It was not only the vehicle conversions on display that were positively received by the stand visitors – the completely revised, clearly laid out product brochures were also well received by customers.

A total of approximately 35,000 visitors came to REHACARE. The group of people affected is larger than one might think – according to the Federal Statistical Office, there were around 7.8 million severely disabled people in Germany at the end of 2021. That is almost one in ten, and more than 4.1 million people were in need of care at the end of 2019, according to care statistics. ■

After a COVID-19 lockdown of two years, the world's largest trade fair for rehabilitation and care took place again in Düsseldorf. The 691 exhibiting companies, associations, and self-help groups presented the latest everyday aids and solutions for almost every disability and every area of life.



KIRCHHOFF Mobility's own development, the new NIVO kit ProLine for hedge beginners, was well received by customers.

A Successful Comeback



The innovative heavy-duty screw holder with an integrated magnet system

The world's largest hardware trade fair is back... and we were right in the middle of it! After a four-year break due to the pandemic, WITTE Tools was back at the EISENWARENMESSE in Cologne as one of 1,400 exhibitors from 50 countries.

AUTHOR: MARTHA SOBEK
SALES & MARKETING LATIN AMERICA
WITTE TOOLS

Innovations such as the revolutionary drive system Tobi®, the perfect symbiosis of bit and screw, were the focus of our booth. The profile of the Tobi® improves efficiency in automatic screw driving applications. Additionally, the team presented the innovative heavy-duty screw holder with an integrated magnet system, which guarantees safety for the craftsman against unintentional slipping of long wood screws, and offers a practical and reliable fixation of bit and screw.

A total of 25,000 trade visitors from 125 countries attended the hardware fair at the end of September. This year, the quality of the discussions was impressive, and the high foreign share of 70% continues to underline the importance of this leading trade fair.

"Reliability and flexibility remain our driving force," says our colleagues of the WITTE Tools sales team. They are already looking forward to presenting our next innovations made in Germany at the upcoming hardware fair in March 2024. ■



The WITTE Tools sales team, from left to right: Frank Rohlf's (R&D), Nadine Polak (International Sales), Alexander Hingst (Director Sales & Marketing), Martha Sobek (Sales & Marketing Latin America), J. Wolfgang Kirchhoff (Managing Partner of the KIRCHHOFF Group), Sabine Grams (International Sales), Christian Piccari (Area Sales Manager) and Nina Packwitz (International Sales).



The WITTE Tools booth was well attended throughout the fair.



The Tobi® drive system is the perfect symbiosis of bit and screw

AUTHOR: CLAUDIA SCHAUE
MARKETING & COMMUNICATION MANAGER FAUN GROUP



WE DRIVE THE CHANGE

The FAUN Group reorganizes itself.

On the road for FAUN customers (from left): Thomas Hoffmann (Head of Sales Waste Collection Trucks Export), Julian Neuhaus (Head of Sales Waste Collection Trucks Germany), Tim Collet (CEO Cleaning Division FAUN Group) and Burkard Oppmann (CSO ENGINIUS and Managing Director FAUN Group).

In the future, the FAUN Group will focus on its three main product groups.

- ENVIRONMENT DIVISION
- CLEANING DIVISION
- TRUCKS DIVISION

This means that the sales teams in Germany and abroad will specialize in the product segments refuse collection vehicles, sweepers and alternative drive trains. **Burkard Oppmann** is additionally appointed as CSO of the Trucks Division and leads ENGINIUS GmbH together with **Thorsten Baumeister**, as CEO of the Trucks Division and **Carlos Aramayo** as COO.

Tim Collet will lead the Cleaning Division, the sweeper branch of the FAUN Group, as CEO in the future. With FAUN Viatic managing director **Helmut Schmeih** and **Mario Ringl** as sales manager for sweepers, he has experienced colleagues in the team. Internationally, the Cleaning Division is strengthened by the Finnish manufacturer Trombia, around managing director **Antti Nikkanen**, and the French company **VALMÉTAL** with managing directors **Jacques Daval** and **Dominique Strucviel**.

Malte Sonnenburg takes over the operational management of FAUN Umwelttechnik and will be supported by **Julian Neuhaus** as new sales manager for waste collection vehicles for Germany, and **Thomas Hoffmann** as head of sales for waste collection vehicles export. FAUN CEO **Patrick Hermanspann** leads the Environment Division in addition to his role as Group CEO. ■

AUTHOR: SENNI NIKKANEN, MARKETING MANAGER TROMBIA TECHNOLOGIES

THE NEW SWEEP



MOI from Finland. FAUN acquired a majority stake in Trombia Technologies in October, an innovative company from Finland that is revolutionizing the market for autonomous, electric-driving sweepers.

The past few years global sweeping industry has been raising eyebrows with Trombia Technologies from Finland that has been sweeping through in Nordic Europe and Northern America. Starting October, Trombia's story took a new step as the company joined KIRCHHOFF Ecotec through FAUN's acquisition of majority of the Finnish company. Trombia is well known for its cutting edge technology behind the electric and autonomous street sweeper system – Trombia Free. Also Trombia manufactures and develops Nordic's leading attachment portfolio of snow and sweeping attachments. To the group, Trombia brings hands-on experience and knowledge on

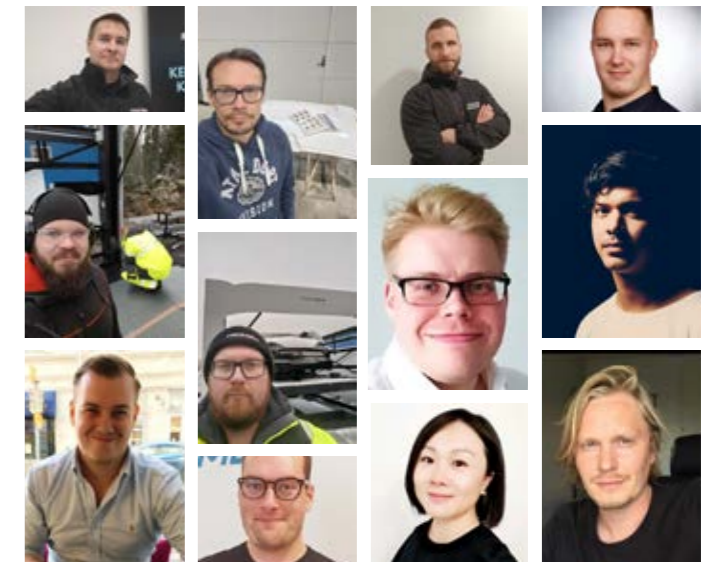
taking machine vision and artificial intelligence into practice and products.

"FAUN and the KIRCHHOFF Group enable us to build strong global operations. The group's desire to be at the forefront of innovation and develop socially sustainable business meets our company's values. Combating climate change requires new solutions on a global level, and Trombia Free and FAUN Group's innovations are paving this way in the field of municipal logistics and waste management", introduces the transaction Trombia CEO Antti Nikkanen. "Together, FAUN and Trombia will accelerate the company's transition to series deliveries and production



of the autonomous street sweeper systems. By bundling our competencies, we are taking a major step towards a sustainable and secure future. I thank the management of Trombia for their trust and look forward to working together." Patrick Hermanspann, CEO FAUN Group.

Being an R&D powerhouse, the company triumphs with the globally patented Trombia cleaning technology that removes heavy debris, street and industrial dust waterless, and with a power consumption of only one-tenth compared to its competitors. Based on this technology, the company launched the Trombia Free sweeping system concept in 2020 and is now proceeding to series production. Trombia Free systems are equipped with an all-weather autonomous, lidar-based, machine vision technology that filters the noise from the environment in rainy, snowy, or alternative conditions. Trombia's headquarter is based in Kuopio, Finland and outsourced production plants in Nurmes, Finland, and Tabivere, Estonia. Following the FAUN's acquisition, the original team at Trombia remains leading the business and takes charge of an ambitious business plan, where the first priority is to provide fully automated industrial district cleaning solutions to global industrial and logistics hubs – closed environments, where entering with autonomous vehicles is faster from a legislative point of view. After the industrial districts, numerous smart city projects globally have also been looking to get the autonomous maintenance vehicles on the streets and public spaces. "Right now, we are focused to offering the full power, effortless and automated industrial district cleaning solution to the large seaports, airports and industrial plants, where automation really brings value and benefits to our customers." Jaakko Happonen, Founder and Chief Designer of Trombia



manufactures today over 300 units annually for the high-end attachment market. The shift to autonomy was just natural according to the team. "When it comes to autonomous development, it just looks more straightforward and sustainable for environment that we automate the work tools and equipment doing the work rather than the chassis and the vehicles around it. This gives us the edge the redesign the new products fully from a sustainable perspective without ties to the past." Petri Heikkinen, Chief Designer of Automation at Trombia

The attachment range remains strong in the portfolio and gets also a clear boost with the ability to distribute across the globe under the arms of FAUN Group. Autonomous snow plowing may be a tough ask for this coming winter, but we look forward and stay tuned for hearing news from the Trombia's young and innovative team. ■

Attachments go autonomous

While attention is definitely on the Trombia's contribution on megatrends in automation and electrification, the company's background may come as a surprise. Since founding in 2011, Trombia has developed a full winter maintenance portfolio for hydraulically attached snow plows and spreaders and

More about the Trombia free:



**AUTHORS: CLAUDIA SCHAUE
MARKETING & COMMUNICATION MANAGER FAUN GROUP
FREDERIK LÖSCH
MARKETING MANAGER ZÖLLER-KIPPER**

Ready. Steady. Green!

We make the world a bit cleaner. With this aim, ENGINIUS has started with the hydrogen trucks. In the meantime, 60 BLUEPOWER refuse collection trucks are in use and ensure a climate-neutral and clean waste collection.

Many waste management companies in Germany and abroad are already driving clean and emission-free. Among the companies that have put hydrogen trucks into operation this year are the waste management companies in Lübeck, Herne, Recklinghausen,

Aachen, Herten - all in Germany and in St. Helens in England and as well in Graz, Austria. In Lübeck, the waste management company added the first BLUEPOWER CLEAN DRIVE X4 to its fleet. The project is also funded by the German Federal Ministry of Transport and Digital Infrastructure (BMVI) and supported by the National Organization Hydrogen and Fuel Cell Technology (NOW GmbH) and the Jülich Research Center GmbH. "We look forward to continuing the good, cooperation in the field of alternative alternative drive systems," says Jürgen Kowalke, Head of Sales & Service Germany of the ZÖLLER-KIPPER GmbH. Under the name "WASTL", Holding Graz and the Saubermacher joint venture, SERVUS, also rely on a BLUEPOWER CLEAN DRIVE. The hydrogen waste collection vehicle was handed over by the



The new delivered BLUEPOWER CLEAN DRIVE X4 from Entsorgungsbetriebe Lübeck at the VKU - Verband kommunaler Unternehmen e.V. (Association of Municipal Enterprises) conference of the coastal countries group in the port of Travemünde.



BLUEPOWER delivery in Graz; photo credits "Der Österreichische Transporteur".



The Ruhr Festival City of Recklinghausen is taking over two ultra-quiet and clean ROTOPRESS BLUEPOWER into service.



Handover of keys by Burkard Oppmann (right) to Herne's Lord Mayor Dr. Frank Dudda, Carsten Sußmann (Board of Management, Entsorgung Herne)



Herne runs on hydrogen.



Ceremonial takeover of the ROTOPRESS BLUEPOWER in St. Helens.

STUMMER team. With this new drive technology, the Austrians aim to reduce more than 56 tons/year of CO2 emissions compared to a conventional diesel refuse collection vehicle. By 2027, the Graz-based company plans to invest around 3.8 million euros in further alternatively powered refuse collection vehicles. Harald Posch and Frank Dicker, SERVUS managing directors: "WASTL is Austria's most modern hydrogen-powered refuse collection vehicle and demonstrates our claim to create added value for our clients and customers with innovations. At the same time, we also want to make our contribution to ensuring that Graz continues to be one of the most livable cities in Europe."

The FAUN ZÖLLER UK team was pleased to deliver the first BLUEPOWER ROTOPRESS to the town of St. Helens in the northwest of England in autumn. This makes the community, which is home to 106,000

people, one of the showcase regions for hydrogen technology in the UK. The hydrogen sector is to be expanded in the area near Liverpool, involving local companies such as Pilkington Glass and the bus industry.

Since this year, North Rhine-Westphalia's waste disposal service providers have been relying increasingly on hydrogen trucks. In Herne, for example, six BLUEPOWER VARIOPRESSs were taken over, in Recklinghausen two of the environmentally friendly trucks are in operation, and the city of Herten also added two BLUEPOWER refuse collection vehicles to its fleet. FAUN managing director and CSO for ENGINIUS Burkard Oppmann: "I would like to thank the waste disposal companies for joining us on the climate-neutral waste disposal path, for being patient and for believing in hydrogen as the energy source of the future. Only together can we achieve the climate in the transport sector." ■

AUTHOR: STEWART GREGORY
COMMERCIAL DIRECTOR FAUN ZOELLER UK

Big Wheels Keep on Turning...

FAUN ZOELLER UK has given back! Logan Scobbie has Cerebral Palsy and had been in a standard wheelchair all his life. Logan needs to be manually pushed this means he is dependent on other people. Adela Scobie, Logan's mum commented: "Logan is 9 years old and was born prematurely at just 25 weeks. We had been told a lot of negative things about him, but he has proved them wrong. For example, he is now in mainstream school learning through an eye gaze computer to communicate. Logan is an adrenaline junkie; the faster and rougher the better. We were advised by the NHS that Logan would not be able to control a motorised wheelchair, due to the severity of his Cerebral Palsy), but he was playing on a Play Station which he understands the concept of. He did not just wiggle the joystick but was in control of the man on the screen, so we thought why we could not try a chair? We saw a link online for the company Tiny Trax chair and contacted them for a demonstration to see if Logan would be able to control it. He took to it well and then decided to set up a Go Fund me page to help with the purchase. Derek McCathie, a family friend, kindly shared the link with his contacts, including FAUN ZOELLER, who did not hesitate in helping."

Derek McCathie had contacted regional business manager Duncan Angus, who then spoke and passed it on to FAUN ZOELLER Commercial Director Stewart Gregory, commenting, "It was quite simple when deciding on how we could support Logan, because at FAUN ZOELLER UK we have a charity committee, where I talked to the members who unanimously agreed to help. The opportunity to help and provide

Logan and his family with independence and freedom was why we wanted to help. To know how much this has benefitted Logan is great to hear, and at FAUN ZOELLER UK, we understand the importance of giving back to the community." "Everyone within the business believes in this motto, and we have many things that we get involved in." added Simon Hyde, general manager FAUN ZOELLER UK.

The Tiny Trax-powered wheelchair allows Logan to be free from the standard wheelchair. Giving the opportunity now to freely explore the world under his powered independence for the first time. FAUN ZOELLER UK was able to purchase this custom-made wheelchair for Logan means he is free to explore the Kelpies in Falkirk and play with his younger sister. The Tiny Trax is an all-terrain buggy. The farm tracks that are Logan's domain in Clackmannanshire will not be a barrier for him anymore. Adela continued to comment on how shocked they were when FAUN ZOELLER UK offered to purchase the chair for Logan. "To our amazement, they did not just donate towards the machine but purchased it outright. The freedom it has given Logan has been life-changing; he now plays with his sister in a field, weaving about cones, and follows a course we made. He follows her when she is on her bike and her quad. He is beginning to learn road sense by using a zebra crossing waiting for the cars to stop before he can go," she says. "It has opened a lot of doors for him, and even better, when school re-started, he now uses it there as well. It's life-changing for the whole family. We are eternally grateful for the help provided by Stewart and his colleagues at FAUN ZOELLER UK." ■

Logan Scobbie can now keep the wheels turning on his own. The nine-year-old suffers from Cerebral Palsy, a disorder of the nervous and muscular system. To enable Logan to be more independent, his family wanted an electric wheelchair for him. FAUN ZOELLER UK provides Logan with freedom and independence.



Logan isn't the only one happy about his electric ride. Stewart Gregory and Simon Hyde (right) are also pleased that they were able to help.

NICE TO MEET YOU

**AUTHOR: FREDERIK LÖSCH
MARKETING MANAGER ZÖLLER-KIPPER**

In 2021, FAUN and ZOELLER founded the rental company ECOTEC Fleet. Managing Director Malte Sonnenburg is very satisfied with the development of the the last two years and announces to offer vehicles with identification systems very soon.



ZOELLER MEDIUM X2 body and DELTA 2301 lift from the ECOTEC Fleet program.



Sweepers can also be rented from ECOTEC Fleet.

Time for your own core business, always the best truck, efficiency and flexibility – are good reasons to opt for renting instead of buying. This also applies to waste disposal trucks and sweepers.

For this reason, the body manufacturers ZOELLER and FAUN decided in 2021 to bundle their competences and to found the joint venture ECOTEC Fleet out of FAUN Services GmbH. A company with a complete range of services for rental, used trucks and financing.

The idea succeeded and after two years Malte Sonnenburg (managing director) and his team are super happy. The demand for rental vehicles is, due

to the current situation, very high and will not change in the near future. The team currently looks after 360 waste collection trucks and 40 sweepers. This is by no means the end of the story. 60 more rear loaders are soon to be on Europe's roads, which will further rejuvenate the average age of the vehicles from less than three years. In 2023, the portfolio will be expanded to include vehicles with alternative drives, such as ENGINIUS BLUEPOWER, DESIGNWERK and GOUPIL (crane truck for underfloor containers). Furthermore, ECOTEC Fleet will take identsystems from the provider C-trace into the short-term rental.

In addition to its main market in Germany, ECOTEC Fleet is also active in Belgium, Spain and Portugal. In Austria, the rental experts work closely with Stummer Kommunalfahrzeuge and FAUN Austria, in France with B.O.M. Services or with AW Materieel in the Netherlands. ■



Malte Sonnenburg and Ron van de Klashorst (right) are busy all the time.

When do we rent?



MEDIUM X2/X4 – Body Series Successfully Launched on the Market

AUTHOR: FREDERIK LÖSCH
MARKETING MANAGER ZÖLLER-KIPPER



On Hanover's streets since July: BLUEPOWER CLEAN DRIVE X4 with ROTARY 2418 lifter in eye-catching design. Source: (aha)

Zöller-Kipper GmbH has successfully switched over to the MEDIUM body family in the domestic waste sector. With the latest development of this model series, which is sold since 2022, and the many body variants a high flexibility in the choice of bodies for the disposer is achieved. The complete changeover to this product family for the domestic waste fraction will take place next year.

The premium domestic waste vehicle models MEDIUM X2 in the long version and the MEDIUM X4 in the short version offer even more volume. This is achieved thanks to the steeper angle of the rear section. A weight optimized and reinforced body result in increased payload. The use of highly wear-resistant materials, particularly in the range of movable compactor components guarantee a long life. The tailgate cylinders on the roof ensure an optimized shift of the centre of gravity towards the front axle.

The model family MEDIUM offers great flexibility fulfilling the needs during a collection tour. The narrower version with a body width of 2.30 m is perfect for residential areas and urban areas with narrow roads. More volume can be gained with a 200 mm higher body and the 200 mm lower version is perfectly suited in connection with a body crane with hopper. This way, all challenges such as the disposal of underground containers can be overcome.

The CLEAN DRIVE X2 and/or X4 is a specially designed body for the BLUEPOWER chassis and for other fully electric chassis with HV interface. It is an electrified body with two interior electric motors with directly mounted hydraulic pumps, a converter and a rectifier. When using the fully electric lifter system EPSILON only one e-motor with hydraulic pump is installed in the body.

Further body variants are the document shredder which is ideally suited for the collection of data protection papers and the wash combination that offers simultaneous cleaning of the containers along with the collection. This means that the demand for hygienic containers can be implemented very economically. The conclusion: All requirements for the disposal of domestic waste can be simply met with a MEDIUM body. ■



The "Narrow" variant of the ZÖLLER MEDIUM X4 is optimised for inner city road guidance



The wash combination of STUMMER offers an independent cleaning of the containers.

The latest features
of MEDIUM X2/
X4 in an animation
video



AUTHOR: KATARZYNA STERNE
CEO ASSISTANT / MARKETING &
COMMUNICATION ZOELLER TECH

New factory built in 2014
and extended in 2021 in
Rekowo Górne

A VERY SPECIAL YEAR

30 years ZOELLER TECH. 25 years EKOCEL. 2022 is a very special year for the polish ZOELLER Group members. They celebrate a remarkable corporate development from a local producer of municipal waste sorting and compost processing equipment into the largest state-of-the-art factory of municipal vehicle bodies in Europe. »



New production facility in Rekowo Górne

“Today, we are a globally recognised brand name and we owe this to the support and commitment of the other companies of our Group – ZÖLLER-KIPPER, STUMMER and HALLER BENELUX –, which was of particular importance in the initial phase of our existence” recalls Rainer Rohler, CEO of ZOELLER TECH in Poland.

It all started with the courageous move in 1992 to register a company named SKK starting as a small plant in Puck. “In the early days the company was involved in the production of municipal waste sorting and compost processing equipment (composting plants). Most of the equipment which was manufactured was assembled in Germany” remembers Marcin Wołowicz, Quality Assurance Engineer-Customer Service. The first refuse collection vehicle then was manufactured in 1997, which was a milestone for the success story of the company. Courage and initiative were once again in demand. Andrzej Potrykus, Production Shift Manager, and his colleague Adam Lekner, Production Master, were sent to STUMMER in Austria for refuse collection vehicle construction

training. “The training we received resulted in the production of our first RCV bodies. Both orders were meant for the Polish market including a hook-lift truck for the Sanipor company in Gdynia and the first MEDIUM refuse collection vehicle with a SK 200 hopper for the Altwater company” narrates Andrzej Potrykus.

Ever since the company has grown continuously. Countless awards, medals and prizes for innovative product and service solutions show the successful development of the company. Additionally more than 800 jobs have been established since the founding. Today more than 1.450 refuse collection vehicles leave the factory in Rekowo Górne in Poland each year to be used worldwide. “We also have been maturing and gaining knowledge and experience over the decade” concludes Rainer Rohler and says “We want to become a partner in business. Hence, I would like to wish myself, our employees, our clients, suppliers and contractors mutual understanding, patience while working out the best solutions and determination in implementing them.” ■

ONE OF US



” YOU ARE AN IRONMAN

These magical words are heard by all participants at the finish line in Kona Hawaii after a 3.8 km swim, 180 km bike and 42.2 km run. Amazing distances that require discipline, training, faith and passion. The heated atmosphere, the hype and mystique of this event motivate athletes to perform at their best. Sylvi Lehmann, Head of Finance & HR at Contena-Ochsner AG in Urdorf (Switzerland), is an Ironwoman. At this year's Ironman in Hawaii she crossed the finish line with a time of 14:12:43 hours. We are so proud of our colleague and congratulate her on this personal success. We celebrate her for having mastered this athletic and mental challenge with a smile on her lips. She is our hero. She is ONE OF US.

AUTHOR: ISABELLE CUROT
ASSISTANTE DG SEMAT

Close to the Customer...

is the slogan of SEMAT. To live up to this claim SEMAT has opened a brand new centre in the heart of the South-West in France near Montauban. In this area of 18 departments with a population of 8,4 M the average RCV purchase per year is 140.




In this region with a high demand there are currently 1.300 SEMAT vehicles running. Antoine Lecuyver as regional manager is at the head of this organization which now has 11 employees, including 5 mobile technicians. The SEMAT service network is composed of 7 regional centres and 85 employees.

The new workshop near Montauban offers many kinds of services including maintenance, repair, assistance, training, renting and second hand vehicles.

Above: The new SEMAT Service Center in the southwest of France. **Left:** Manuel Cournot (CEO SEMAT, I.) dedicates the new location

Many Customers attended the official opening of the brand new service centre and were enthusiastic about the equipment of the workshop and the particularly friendly atmosphere.

In order to extend and complete this service offer the close by workshop of Caujolle Meca+, which is located close to Toulouse, will join SEMAT within the next weeks. It will be managed by the SEMAT location near Montauban and provides a complementary service. Caujolle Meca+ focuses on the repair of sweepers and trailers. ■



Merry Christmas and
a Happy New Year!



LORES RECIPE BOOK

Oh, how good that smells....
Our suggestion for Christmas cookies
from Lore Kirchhoff.
www.lores-rezepte.de/en